

ABSTRACT OF THE DISCLOSURE

Disclosed herein are system(s), method(s), and apparatus for simultaneously displaying multiple video streams. The video streams are encoded as a video sequence, which can include temporally coded bi-directional pictures. A decoder decodes a picture from each of the video sequences, which can include temporally coded bi-directional pictures. The set of frame buffers stores the past prediction frames and the future prediction frames for each video sequence. A table indicates the location of the past prediction frame and the future prediction frame for each video sequence. A display engine prepares a frame from each video sequence for display. The location of the frames for display are indicated by a register.